

WHAT IS CLAIMED IS:

1. A system comprising:

an audio-visual input system at a first location that is operable to receive audio-visual information associated with a user;

a gesture determination system at the first location that is operable to determine
5 gesture information associated with a state of mind of the user; and

a tele-embodiment unit at a second location that is operable to receive the gesture information and engage in movement corresponding to the gesture information, whereby the movement of the tele-embodiment unit expresses the state of mind of the user.

10 2. The system of claim 1 wherein the second location is a site of a conference, and the tele-embodiment unit conveys a physical presence of the user.

3. The system of claim 1 comprising an audio-visual output system at the second location that is operable to output the audio-visual information associated with the user.

15 4. The system of claim 1 wherein the tele-embodiment unit includes a robotic arm associated with a monitor and camera.

20 5. The system of claim 4 wherein the tele-embodiment unit is operable to move the monitor and camera in alignment with one another.

6. The system of claim 1 wherein the gesture determination system includes a gesture control device by which the user inputs the gesture information.

25 7. The system of claim 6 wherein the gesture information includes selectable emotional states and the movement of the tele-embodiment unit is pre-programmed to correspond to a selected emotional state.

30 8. The system of claim 1 wherein the gesture determination system includes a gesture control device that is operable to track physical movements of the user.

9. The system of claim 8 wherein the gesture determination system includes a gesture interpreter for associating the physical movements with the state of mind of the user.

5 10. A method comprising:
receiving audio-visual input from a conference participant;
determining expression information associated with a non-verbal communication of
the conference participant;
transmitting the audio-visual input and the expression information to a conference
10 location;
rendering the audio-visual input at an audio-visual output associated with a tele-
embodiment unit at the conference location; and
moving the tele-embodiment unit, based on the expression information, to reflect the
non-verbal communication of the conference participant.

15 11. The method of claim 10 wherein determining expression information
comprises receiving a selection of expression information from among a pre-selected list
available to the conference participant.

20 12. The method of claim 10 wherein determining expression information
comprises:
tracking physical movements of the conference participant; and
running a software algorithm to determine the non-verbal communication, based on
the physical movements.

25 13. The method of claim 10 wherein moving the tele-embodiment unit comprises
moving a video screen that is attached to a robot arm so as to be pivotable and movable in
three dimensions.

14. The method of claim 10 wherein the tele-embodiment unit has a one-to-one correspondence with the conference participant, such that a physical presence of the conference participant is conveyed at the conference location.

5 15. A video-conferencing system comprising:
a plurality of participant input systems corresponding to a plurality of participants, each input system operable to receive audio-visual input from its corresponding participant; and

10 a plurality of physical conference units located at a conference location that is remote from a location of each of the participant input systems, each of the physical conference units corresponding to one of the plurality of participants and including audio-visual output capabilities,

wherein the physical conference units convey a physical presence of their corresponding participants at the conference location.

15 16. The video-conferencing system of claim 15 wherein each participant input system comprises:

a gesture determination system operable to receive gesture information associated with a state of mind of its corresponding participant; and

20 a remote communication handler operable to forward the gesture information and the audio-visual input to its corresponding physical conference unit.

17. The video-conferencing system of claim 16 wherein the gesture determination system comprises:

25 a gesture control device operable to track physical movements of its corresponding participant; and

a gesture interpreter operable to associate the physical movements with the state of mind.

30 18. The video-conferencing system of claim 16 wherein each physical conference unit comprises a robotic unit operable to move in coordination with the gesture information,

such that the physical conference unit physically expresses the state of mind of its corresponding participant.

19. The video-conferencing system of claim 18 wherein the robotic unit
5 comprises a video screen aligned with a camera and attached to a robot arm that is operable to move the video screen and camera in conjunction with the gesture information and the audio-visual input.

20. The video-conferencing system of claim 19 wherein the robot arm is operable
10 to move the video screen and camera in three dimensions.